

Little Dome C

Beyond EPICA Oldest Ice Drilling Site (75.29917 °S, 122.44516 °E)

Situation Report 23, 19. December 2023

Personnel @LDC:

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Weather at LDC 5 pm: sunny and nice; temp.: -20.9°C; wind: 0.8 m/s



Today was very similar to yesterday. We're continuing our shift work on drilling, logging, and processing last year's core. In terms of drilling we are still using the same set up and are still getting ice cores around 4.5 meters in every run of excellent quality.

What we did today at LDC:

- We continued to drill in shifts;
- We are now processing the ice from 222m to 608m, which is left unprocessed from last year. We finished another 51 m in shifts, reaching 551m depth;
- We continued drilling with the IGE's dry shallow drill;
- We continued BAS geophysical survey side project.





Figure 1: The "pig" where we are separating drilling fluid from water : photo: O. Alemany



Figure 2: celebrating 500 meters of processed ice core in the science trench. Photo : M. Mühl

End of day statistics at 19h30

Driller's depth: 1056.28 m, in between 19h30 yesterday and today 19h30 we made 9 runs (drillers delta depth: 4.34, 3.82, 4.52, 4.21, 4.51, 4.46, 4.52, 4.5 and 4.49) for a total length of 39.37 meters (drillers delta depth);

Logger's depth: 1058.44 m

Current processing depth: 551 m, daily total: 51 m, season total: 529 m.

OA, MH, JW, and SP, 19.12.2023

